CodeBook.md

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Code Book - Getting and Cleaning Data Project

This code book that describes the variables, the data, and the transformations to reproduce the tidy data as shown in output file, "tidydata.txt"

Identifier variables

The first two columns in the tidydata.txt, subject and activity, are used as identifier.

- subject
 - ID of the test subject (30 volunteers), integer type, ranges 1-30
- activity

ID of activity, character string, with one of the following values

- WALKING: subject was walking
- WALKING_UPSTAIRS: subject was walking upstairs
- WALKING_DOWNSTAIRS: subject was walking downstairs
- SITTING: subject was sitting
- STANDING: subject was standing
- LAYING: subject was laying

Measurement variables

- timeBodyAccelerometerMeanX
- timeBodyAccelerometerMeanY
- $\bullet \quad time Body Accelerometer Mean Z$
- $\bullet \quad time Body Accelerometer StdX\\$
- timeBodyAccelerometerStdY
- timeBodyAccelerometerStdZ
- timeGravityAccelerometerMeanX
- timeGravityAccelerometerMeanY
- timeGravityAccelerometerMeanZ
- timeGravityAccelerometerStdX
- timeGravityAccelerometerStdY
- timeGravityAccelerometerStdZ
- $\bullet \quad time Body Accelerometer Jerk Mean X$
- timeBodyAccelerometerJerkMeanY
- timeBodyAccelerometerJerkMeanZ
- timeBodyAccelerometerJerkStdX
- timeBodyAccelerometerJerkStdY

- timeBodyAccelerometerJerkStdZ
- timeBodyGyroscopeMeanX
- timeBodyGyroscopeMeanY
- timeBodyGyroscopeMeanZ
- timeBodyGyroscopeStdX
- timeBodyGyroscopeStdY
- timeBodyGyroscopeStdZ
- timeBodyGyroscopeJerkMeanX
- timeBodyGyroscopeJerkMeanY
- timeBodyGyroscopeJerkMeanZ
- timeBodyGyroscopeJerkStdX
- timeBodyGyroscopeJerkStdY
- timeBodyGyroscopeJerkStdZ
- $\bullet \quad time Body Accelerometer Magnitude Mean$
- timeBodyAccelerometerMagnitudeStd
- $\bullet \quad time Gravity Accelerometer Magnitude Mean \\$
- timeGravityAccelerometerMagnitudeStd
- $\bullet \quad time Body Accelerometer Jerk Magnitude Mean$
- $\bullet \quad time Body Accelerometer Jerk Magnitude Std$
- timeBodyGyroscopeMagnitudeMean
- $\bullet \quad time Body Gyroscope Magnitude Std\\$
- $\bullet \quad time Body Gyroscope Jerk Magnitude Mean \\$
- $\bullet \quad time Body Gyroscope Jerk Magnitude Std\\$
- frequencyBodyAccelerometerMeanX
- $\bullet \ \ frequency Body Accelerometer Mean Y$
- frequencyBodyAccelerometerMeanZ
- frequencyBodyAccelerometerStdX
- frequencyBodyAccelerometerStdY
- frequencyBodyAccelerometerStdZ
- frequencyBodyAccelerometerJerkMeanX
- frequencyBodyAccelerometerJerkMeanY
- frequencyBodyAccelerometerJerkMeanZ
- frequencyBodyAccelerometerJerkStdX
- frequencyBodyAccelerometerJerkStdY
- frequencyBodyAccelerometerJerkStdZ
- frequencyBodyGyroscopeMeanX
- frequencyBodyGyroscopeMeanY
- $\bullet \quad frequency Body Gyroscope Mean Z$
- $\bullet \ \ frequency Body Gyroscope StdX$
- $\bullet \ \ frequency Body Gyroscope StdY$
- frequencyBodyGyroscopeStdZ
- frequencyBodyAccelerometerMagnitudeMean
- frequencyBodyAccelerometerMagnitudeStd
- $\bullet \ \ frequency Body Accelerometer Jerk Magnitude Mean$
- frequencyBodyAccelerometerJerkMagnitudeStd
- $\bullet \ \ frequency Body Gyroscope Magnitude Mean$
- frequencyBodyGyroscopeMagnitudeStd
- $\bullet \ \ frequency Body Gyroscope Jerk Magnitude Mean$
- frequencyBodyGyroscopeJerkMagnitudeStd

Produce HTML and PDF output files

library("rmarkdown")

rmarkdown::render("CodeBook.md",output_format = "all")